

That there are no errors in these observations would be an undue assumption ; for who, on such subjects and in the examination of these minute objects, can hope to escape from occasional error ? I invite malacologists to offer their corrections, if I have differed on insufficient grounds from so eminent a naturalist as M. Deshayes ; and I conclude with the evocation,

..... "Si quid novisti rectius istis,
Candidus imperti."

I am, Gentlemen, your most obedient servant,

WILLIAM CLARK.

P.S. I beg that the notice relative to the *Venus orbiculata* of Montagu, in my paper on the genus *Cæcum*, in the 'Annals' for August, may be considered as cancelled.

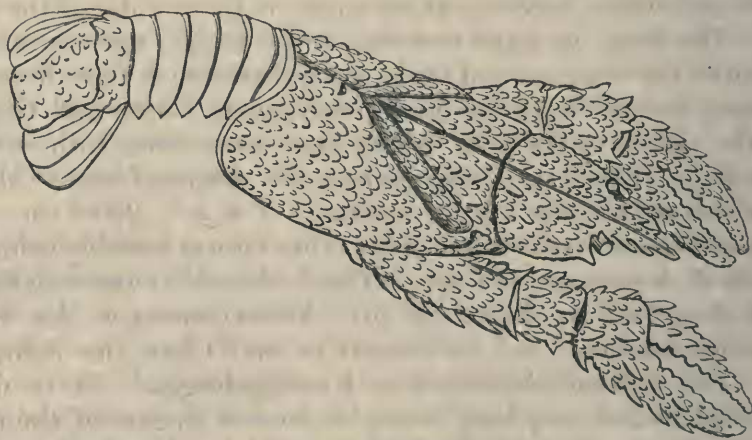
XXXIV.—On the Classification of some British Fossil Crustacea, with Notices of new Forms in the University Collection at Cambridge. By FREDERICK M'COY, Professor of Geology and Mineralogy in Queen's College, Belfast.

[Continued from p. 179.]

Enoploclytia (M'Coy), n. g.

Etym. ἔνοπλος, *armatus*, and *Clytia*.

Gen. Char. *Carapace* fusiform, back rounded, sides convex, gently compressed, posterior end slightly narrowed and deeply



Enoploclytia.

notched for the insertion of the abdomen, much contracted anteriorly, the front extended into a long, sharp-pointed depressed rostrum, the sides of which are armed with three or four strong spines ; one strong spine over the upper external angle of the orbit ; *eyes* on short, thick peduncles ; *nuchal*

furrow strong, slightly arched backwards, the ends reaching each side margin at a point deeply notched by the abrupt narrowing of the margin from thence to the front; *branchial furrows* double, inclosing between them a narrow, pointed ridge on each side, which meets its opposite fellow at less than a right angle (each meets the midline of the back at an angle of about 40°) on a point of the back about halfway between the nuchal furrow and the posterior margin; *abdomen* (including the tail-fins) shorter than the carapace, segments very weak, slightly arched, their ends triangularly pointed (ends of the second one not dilated), sixth longer than the preceding ones, giving origin to the two broad, rotundato-trigonal pair of side-flaps of the tail, which are very large, thin, and undivided by transverse sutures; seventh segment (or middle tail-flap) subtrigonal, thicker than the others and tuberculated; *surface* of carapace, legs and chelæ covered with large spinose tubercles and intervening granules of very irregular size; *first pair of feet or chelæ* very large, subcompressed, fingers slender, with a row of large teeth on the inner edge, carpus very short, tumid, trigonal; *three next pair of legs* slender, compressed (? apparently terminated by a blunt, trigonal, simple claw); *fifth pair* not seen.

In the large, flattened, strongly toothed rostrum, rough spinose legs, the small size of the abdomen, with the general form of its little-arched, weak segments, and the undivided outer pair of tail laminae, this genus approaches the recent *Galathæa* more than any other recent group, differing in its peculiar branchial furrows and ridges, meeting at an angle on the middle of the back, &c. The long, dentated rostrum, large, rough, spinose tuberculation of the carapace and chelæ easily distinguish those large cretaceous species from the diminutive genera *Clytia* and *Glyphæa* of the oolitic rocks with which they have been hitherto confounded. The type of the genus is the *Astacus Leachii* (Mant.), to which at least the figures marked f. 1 & 4. t. 29 of the 'Geology of Sussex' refer (some of the other figures possibly belonging to the *E. brevimana*, M'Coy). The *E. Leachii* is also well figured and described by Reuss in his 'Versteinerungen der böhm. Kreideformation,' and by Geinitz in his 'Char. der Schich. u. Pet. des sächsisch-böhmischen Kreidegebirges.' It is distinguished by the very long, straight, narrow fingers of the chelæ, which are nearly twice the length of the basal part of the hand, or from their base to the carpus, and set on their inner edge with a row of narrow cylindrical teeth their own length apart; the whole hand (or penultimate joint and moveable finger) nearly one-fourth longer than the carapace. A second species of large size and remarkable form occurs in the chalk of Burwell

and at Maidstone, several specimens of which I saw in the astonishingly beautiful collection of chalk fossils belonging to the Rev. Mr. Image, near Bury St. Edmunds: the hand in this species is much compressed as well as the carpus and arm, and all covered with large scattered curved spinose tubercles (largest on the outer and inner edges of the hand, carpus and arm) with an intermediate smaller tuberculation; the basal part of the hand is subrhomboidal, slightly longer than its width; carpus small, its greatest length and width equal, proximal end only half the size of the distal end, abruptly formed by a deep sinus in the proximal half of the inner margin (like that of the right arm of the recent *Callianassa subterranea*); penultimate or immoveable finger straight, rapidly tapering to an obtuse point, its length only equaling that of the hand from the base of the finger to the carpus; moveable or last finger a little longer, not tapering so rapidly, and incurved at the apex, each finger with a row of blunt hemispherical tubercular teeth less than their diameter apart. Average length of moveable finger 2 inches 6 lines, from thence to the carpus 1 inch 9 lines, width at base of fingers 1 inch 9 lines, width of carpus 1 inch 1 line, width at distal end 1 inch 3 lines. I have affixed the name of *Enoploclytia Imagei* to this, the largest and most interesting of the mesozoic Crustacea, to commemorate the zeal and taste of the amiable owner, whose exquisite collection of cretaceous fossils would, if more fully known, greatly increase our knowledge of the fossils of this period.

Enoploclytia brevimana (M'Coy).

Sp. Char. Carapace subcylindrical or slightly compressed, averaging $3\frac{1}{2}$ inches long and 1 inch 9 lines deep; rostrum strong, pointed, with three or four large pointed teeth on each side, margins of the orbits with strong spines; surface closely studded with small tubercles and large scattered spines; hands short ovate, length little more than the depth of one side of the carapace, length of the moveable finger about equal to, from its base to the carpus, and a little longer than, the width of the hand, both fingers incurved at the tip and set on the inner edge with a row of blunt hemispherical teeth half their diameter apart; carpus subtrigonal, a little longer than wide; arm compressed, about one-third longer than wide; surface of hand and carpus with many large, curved, spinose tubercles, and an intermediate, close, smaller tuberculation; length of moveable finger 1 inch 1 line, from thence to carpus 11 lines, width of hand 1 inch.

The very short small ovate hands easily distinguish this species from the other two.

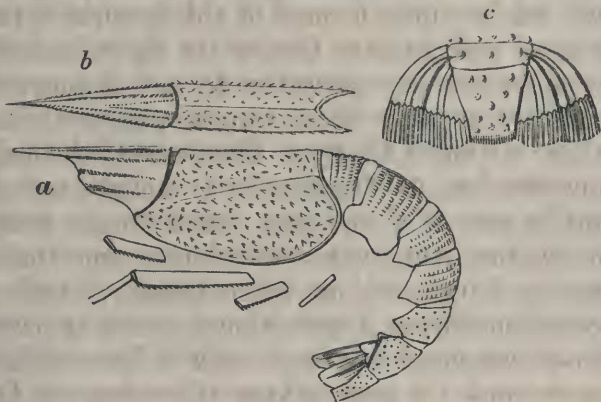
Common in the lower chalk of Cherry Hinton, near Cambridge.

(Col. University of Cambridge and Rev. T. Image.)

(Fam. *Thalassinidæ*.)

Meyeria (M'Coy), n. g.

Gen. Char. Carapace strongly compressed laterally; nuchal furrow very deep, V-shaped, the lateral portions nearly straight,



Meyeria.

a. Side view. b. Carapace seen from above. c. Tail-flaps.

meeting on the back at an acute angle considerably in front of the middle, and extending to the lateral margins at a point deeply notched by the abrupt narrowing of the front from thence to the sharp rostrum: *branchial furrow* forming a nearly straight, delicate, impressed line from near the lower ends of the nuchal furrow to the middle of each side of the posterior margin (never meeting on the midline of the back); portion in front of the nuchal furrow with a few longitudinal, strong, denticulated ridges, rest of carapace rough with small pointed granules: *abdomen* semicylindrical, large, segments sculptured with rows of granules, the ends of the second joint dilated, quadrate, of the others subtrigonal, penultimate joint a little longer than the fifth, carrying the two outer pair of *tail-flaps*, which are strong, truncato-elliptical, with a mesial ridge, ends fimbriated, the outer one on each side divided by a transverse serrated suture about one-third from the end; middle tail-flap oblong, apex truncated, narrower than the base; *legs* slender, compressed, smooth, gradually diminishing in size from the first, the lower edge minutely serrated.

The *Astacus ornatus* (Phil.) is the type of this genus, which, from the great compression of the carapace, size of the abdomen, character and direction of the branchial furrows, &c., seems to

belong to the fossorial family in which I have placed it, the nearest analogue being perhaps the recent *Gebia* which burrows under the mud of Plymouth Sound: the fossils abounding in such a state of perfection in the fine Speeton clay that they must have lived in it and died in the exact spots we now find them, harmonizes with this view of approximating them to those similar little forms which live habitually buried in the mud. The substance of the crust, though very thin, and, in the following species especially, often showing signs of considerable flexibility, seems rather harder than in most of the fossorial types, and the strong fringe of stiff hairs at the end of the tail-pieces is in the fossil replaced by semi-membranous flaps, still however strongly sulcated. I have not seen the extremities of the feet; but if, as I suppose, the so-called *Crangon Magnevillii* of Deslongchamp (Mém. de la Soc. Lin. de Normandie, t. v.) belong to this genus, the four hinder pair of feet would terminate in simple pointed claws, and the first pair form subcheliform pincers, having the hand dilated and truncated at the extremity, which is toothed and has a small spiniform immoveable finger at one end, which is met by the slender moveable finger inflexed from the other end; this also agrees with the general type of the fossorial *Gebia*. The carapace may be distinguished from *Glyphæa* by the branchial furrow in it being very delicate and extending obliquely to the posterior margin without meeting its fellow of the opposite side, while in *Glyphæa* they are very strong and meet on the back from opposite sides at an acute angle, without reaching the posterior margin.

Meyeria magna (M'Coy).

Sp. Char. Carapace about $2\frac{1}{2}$ inches long and 1 inch 2 lines deep at the middle of the side; three strong tuberculated longitudinal ridges on each side of the cephalic part of the carapace; from about the middle of the deep nuchal furrow a row of small tubercles extends halfway to the posterior margin, and higher up (bordering the intestinal region) a similar row on each side extends from the posterior margin nearly halfway to the nuchal furrow; rest of the carapace covered with minute sharp granules, about four in a space of three lines at the middle of the sides; rostrum short, pointed; abdomen about $3\frac{1}{2}$ inches long, each segment with about four irregular, single, crowded rows of granules disposed longitudinally, the broad intervening spaces nearly smooth; a few irregular groups of granules on the extremities; the last segment granulated like the carapace; tail-flaps broad, rotundato-trigonal, finely fimbriated at the ends, each with a strong mesial ridge; transverse suture of the outer pair strongly marked, serrated;

legs subcompressed (section oval), smooth, the lower edge with a row of minute denticles directed forwards; third joint of the first pair nearly 4 lines wide, gradually decreasing to the fifth pair, the third joints of which are about 1 line wide.

Very abundant in the fine Fuller's earth of the "Lobster beds" of the lower greensand of Atherfield, Isle of Wight; also in the Specton clay of Specton, Yorkshire coast.

(Col. University of Cambridge.)

Note.—As the *Glyphæa rostrata* (Phil. sp.) (*Astacus rostratus*, id., Geol. York) has been referred by Herman von Meyer (Neue Gattungen fos. Krebse) and subsequent authors to the *G. Münsteri*, I may mention, that on comparing an authentic cast of that species with the English one, I find the latter fully distinguished, as a species, by the hind part of the thorax being much longer in proportion to the depth, even slightly exceeding in this respect the *G. pustulosa* (V. Mey.), which it exactly resembles in the character of its branchial furrows and their associated lobes, differing however from it and agreeing with the *G. Münsteri* in the abrupt notch-like narrowing of the margin in front of the nuchal furrow.

[To be continued.]

XXXV. — *Supplementary Notices regarding the Dodo and its Kindred*. Nos. 6, 7, 8. By H. E. STRICKLAND, M.A., F.G.S.

[Continued from vol. iii. p. 261.]

6. *On two additional bones of the Solitaire recently brought from Mauritius.*—We are indebted to the officers of the Royal Society of Arts and Sciences of Mauritius for a valuable contribution to Didine osteology. These gentlemen no sooner heard of the interest which the history of the Dodo had excited in Europe, than they undertook to search in Mauritius and the adjacent islands for such parts of the skeleton of these extinct birds as were wanting to complete our knowledge. Before proceeding to excavate the alluvions and caverns of those islands in quest of bones, they wisely commenced by searching the cabinets of their own museum. Two bones were here discovered, which tradition referred to the Dodo, and these precious specimens the Society, with the most praiseworthy liberality, have sent to Europe.

The bones now sent belong, not to the true Dodo, as was supposed by the Mauritian naturalists, but to that longer-legged species which inhabited the island of Rodriguez, and was denominated the Solitaire. They are both metatarsal bones, and consequently are so far only duplicates of portions of that bird which already existed in Europe. But from their superior state of preservation they supply some valuable information which was